



DIFFERENCES IN SPENDING HABITS INFLUENCED BY UPI IN RURAL AND URBAN INDIAN POPULATIONS

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ABSTRACT

Digital payments have become a transformative force in bridging the gap between rural and urban India. While existing research focuses on adoption rates or the impact of UPI on spending patterns, this study investigates the differences in spending habits between rural and urban populations following the introduction of UPI. Utilizing both primary and secondary data, surveys were conducted to analyze spending behaviors in rural areas, while data for urban populations were derived from existing scholarly literature. The findings reveal that rural residents predominantly prioritize saving over spending, whereas urban populations demonstrate increased spending patterns. These results align with prior studies, offering valuable insights into the contrasting financial behaviors shaped by UPI in rural and urban India.

KEYWORDS: UPI, Digital Payments, Rural Spending Habits, Urban Spending Patterns

INTRODUCTION

Over the last decade, technological innovations in payment methods have enabled individuals worldwide to transition from cash transactions to digital payments. Popular digital payment platforms include Apple Pay, AliPay, WeChat Pay, and Google Pay (Matthewson, 2024). In 2022, India accounted for 46% of total global digital transactions, establishing itself as a global leader in digital payments. A key driver of this transformation in India has been the Unified Payments Interface (UPI), a system launched by the National Payments Corporation of India (NPCI) in 2016. UPI connects multiple bank accounts through a single application, offering a convenient platform for managing various transactions simultaneously (NPCI, 2023). Between 2017-18 and 2023-24, payment transactions through UPI grew exponentially from 2,071 crore to 18,737 crore (Press Information Bureau, 2024).

India's population is often categorized into urban and rural groups, which exhibit notable differences in their adoption and usage of UPI. Urban areas, characterized by advanced infrastructure and resources, have seen widespread UPI adoption. A survey conducted in urban regions revealed that 74.2% of respondents agreed that UPI usage led to increased spending behavior (From Cash to Cashless: UPI's Impact on Spending Behaviour among Indian Users, 2024). Similarly, studies in Chennai and Mumbai found that 79.7% of urban respondents reported overspending due to UPI's ease of access (Rafee et al., 2022). Research by Padmavathi et al. (2021) in Coimbatore highlighted increased expenditure across categories such as clothing, entertainment, food, travel, and home décor. However, contrasting evidence also suggests that some urban users effectively manage their expenses through UPI (Das, 2024).

In rural areas, digital payment adoption reflects unique

patterns shaped by challenges like limited connectivity and lower financial literacy (India.gov.in, 2013). Rural regions, which house 65% of India's population (Team, 2023), often face barriers to UPI adoption. For example, Gadge & Rai (2019) found that residents of the Brahmapuri area preferred cash transactions due to low awareness, literacy levels, and unreliable internet access. Maiya (2020) observed that while UPI awareness was relatively high among rural populations, its actual usage remained limited.

While considerable research has examined UPI adoption and spending behavior in urban areas, findings on rural populations remain inconsistent. Existing studies provide mixed insights into rural users' engagement with UPI, and there is limited research specifically addressing UPI's impact on their spending habits. This study aims to fill that gap by utilizing both primary and secondary data to investigate differences in spending habits influenced by UPI across rural and urban populations. We hypothesize that the urban population demonstrates higher spending levels with UPI compared to their rural counterparts.

LITERATURE REVIEW

Research conducted in various urban regions of India, including cities such as Chennai and Bangalore, gathered data from a sample of 192 participants. The survey revealed that 153 respondents (79.7%) felt they were overspending due to UPI usage, while 24 respondents (12.5%) were unsure about their spending habits. The remaining 15 respondents (7.8%) reported that UPI had not influenced their spending patterns. Additionally, 154 respondents (80.2%) indicated that their savings had decreased, while only 14 (7.3%) expressed the opposite opinion. This study highlighted a notable shift toward UPI usage, leading to increased consumer overspending and reduced savings among urban populations (Rafee et al., 2022).

A similar study examined the influence of UPI on consumer spending in Coimbatore City, focusing on selected product categories, including clothing and accessories, entertainment and communication, food, travel, and home décor. Data collected from 228 respondents indicated an increase in expenditure across all these categories when transactions were cashless (Padmavathi et al., 2021).

Another study explored the changes UPI has brought to the spending patterns of urban individuals (From Cash to Cashless: UPI's Impact on Spending Behaviour among Indian Users, 2024). After surveying 235 participants and conducting interviews, the study found that 91.5% of respondents were satisfied with UPI, while 95.2% found it convenient to use. This convenience stems from its quick transaction process and the elimination of the need to carry large amounts of cash. However, 74.2% of respondents reported increased spending after adopting UPI, attributed to the ease and transparency of digital payments (Ahn & Nam, 2022).

While studies generally point to increased spending in urban areas, some instances demonstrate mindful financial management. For example, a coconut seller in New Delhi uses UPI to receive payments, which are saved in his bank account. He manages his expenses through cash and tracks his spending effectively, preventing overspending. Similarly, a domestic helper in Greater Noida, who previously faced theft of her cash wages, now secures her earnings through UPI and uses the funds efficiently for her daughter's education (Das, 2024).

However, literature presenting contrasting findings on UPI adoption and its effects in urban areas remains limited, with most studies aligning with increased spending behaviors. In rural areas, research highlights distinct challenges in adopting UPI. A study conducted in Brahmapuri, Maharashtra, surveyed 100 participants and found that most preferred cash transactions over UPI due to concerns about cybercrime, lack of infrastructure, low literacy rates, and insufficient security features (Gadge & Rai, 2019).

Similarly, a survey conducted in Udipi Taluk, Karnataka, gathered data from 80 participants. The study revealed that only 45% of rural respondents, primarily those with higher education levels, engaged in digital transactions, while 55% continued to rely on cash. Despite this, 67% of respondents were aware of cashless transaction systems (Maiya, 2020).

An explanatory study in three villages of Bihar found generational differences in UPI adoption. While older generations resisted using UPI, younger generations were more adept at integrating it into their daily lives, reflecting their greater familiarity with mobile technology and digital payment systems (Mehta, n.d.). Additionally, a professor's analysis noted that low-income groups benefit from UPI by accumulating their transactions in bank accounts, which helps track expenses and income, encouraging savings and informed financial decisions.

Despite these insights, opinions on UPI adoption in rural areas remain mixed, and limited research has explored whether

UPI usage leads to increased or decreased spending among rural populations. To address this gap, we conducted a survey gathering information from rural residents across various districts in India.

METHODS

Participants

The sample consisted of 30 participants from rural populations, with an average age of 32 years. Participants were recruited using convenience sampling, targeting individuals who work in urban areas but originate from rural villages. To control for potential confounding variables, participants were instructed to respond to the survey on behalf of their families residing in their rural hometowns.

Design and Materials

The study employed a survey-based design to investigate the relationship between UPI usage (independent variable) and spending habits (dependent variable) among rural and urban populations. Given the limited research on UPI's impact on rural spending behaviours, primary data were collected through Google Forms consisting of nine structured questions (refer to Appendix). To ensure inclusivity and accessibility, the survey was available in both English and Hindi, catering to the linguistic diversity of participants.

RESULTS & DISCUSSION

Rural

A survey conducted by the authors on rural areas:

Statements	Responses	Total	Total (%)
Access to a phone with internet in the rural area	Yes	29	96.7%
	No	1	3.3%
Comfortable with technology	Yes	19	63.3%
	No	11	36.7%
Rural population using UPI?	Yes	21	70%
	No	9	30%
Impact of UPI on rural population's spending habits	Spend more	10	33.3%
	Spend less and save more	13	43.3%
	No change	2	6.7%
	We do not use UPI	3	16.7%

Note: The total no. of respondents was 30 belonging to different rural regions

The results indicate that while 70% of rural respondents use UPI, 43.3% reported spending less and saving more due to UPI, and 33.3% noted increased spending. Notably, 96.7% of respondents had access to phones with the Internet, but only 63.3% felt comfortable with technology.

Urban

A survey conducted by other researchers on urban areas:

Statements	Options	Numbers	Total (%)
Satisfaction Levels	Highly satisfied	129.25	55%
	Satisfied	85.775	36.50%
	Neutral	18.095	7.70%
	Dissatisfied	0.94	0.40%
	Highly dissatisfied	0.94	0.40%
Convenience	Highly convenient	163.325	69.50%
	Convenient	60.395	25.70%
	Neutral	8.695	3.70%
	Inconvenient	0.94	0.40%
	Highly inconvenient	1.645	0.70%
Budget Exceedance	Yes	140.53	59.80%
	No	93.53	39.80%
	Maybe	0.94	0.40%
Do Users Agree that UPI Impacts their Budget	Strongly agree	54.05	23%
	Strongly disagree	27.025	11.50%
	Neutral	62.745	26.70%
	Agree	54.755	23.30%
	Disagree	36.66	15.60%
How often do Users use UPI	Daily	190.585	81.10%
	Weekly	36.66	15.60%
	Monthly	2.585	1.10%
	Occasionally	4.465	1.90%
	Rarely	0.705	0.30%

Note: The total gathered responses were 235

The urban population demonstrated higher satisfaction (91.5%) and convenience (95.2%) with UPI usage. However, 59.8% reported exceeding their budgets due to UPI, and 46.3% agreed it had a significant impact on their finances. Most urban users (81.1%) utilize UPI daily.

Comparative Insights

The findings reveal distinct patterns in UPI usage and its impact on spending habits between rural and urban populations. While 43.3% of rural respondents reported increased savings, 59.8% of urban users indicated higher spending. Additionally, urban users showed significantly higher daily usage (81.1%) compared to rural users, where 30% of families did not use UPI at all. This highlights the disparities in adoption and financial behavior influenced by UPI across different demographic groups.

CONCLUSION

This paper gathered information on the influence of UPI on spending behaviour among urban and rural populations. Secondary sources provided insights into urban regions, while primary data from a survey was collected for rural areas across

various districts in India. The findings indicate that over half of the urban population surveyed tends to overspend, with approximately 140 out of 235 respondents acknowledging that they exceeded their budget due to UPI usage. In contrast, the rural survey results revealed that the majority of respondents are spending less and prioritizing savings.

More than three-quarters of respondents from urban areas and over half of the rural population actively use UPI in their daily lives. Both groups expressed high levels of satisfaction and comfort with UPI, highlighting its convenience as a key factor driving adoption. However, urban areas exhibit a higher frequency of UPI usage and a greater tendency towards increased spending compared to rural regions.

While UPI adoption and awareness are growing rapidly among rural populations, the findings underscore a clear disparity in usage patterns between rural and urban areas. The primary limitation of this study lies in the small sample size for the rural survey. Despite this, the survey provided valuable insights into the rural population's behaviour, addressing a gap in the existing literature and enhancing our understanding of their interaction with UPI.

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APPENDIX

Google Form for the Rural Population

- **Name:**
नाम:
- **Age:**
उम्र:
- **Village:**
गाँव:
- **District:**
जिला:
- **What is the monthly income of your household?**
आपके घर की मासिक आय क्या है?
- **Does anyone in your household have access to a phone with internet in your area?**
क्या आपके घर में किसी के पास आपके क्षेत्र में इंटरनेट वाले फोन की पहुँच है?
- **Do your family members feel comfortable using technology?**
क्या आपके परिवार के सदस्य तकनीक का उपयोग करने में सहज महसूस करते हैं?
- **Does anyone in your household use UPI?**
क्या आपके घर में कोई UPI का उपयोग करता है?
- **Has using UPI changed your household's spending habits?**
क्या UPI का उपयोग करने से आपके खर्च की आदतें बदली हैं?